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Secretary for  
Environmental Protection

# California Regional Water Quality Control Board

## North Coast Region

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**Arnold Schwarzenegger**  
Governor

**ORDER NO. R1-2006-0045**  
**NPDES NO. CA0022764**

### WASTE DISCHARGE REQUIREMENTS AND MASTER RECLAMATION PERMIT FOR THE SANTA ROSA SUBREGIONAL WATER RECLAMATION SYSTEM

The following Discharger is subject to waste discharge requirements as set forth in this Order:

**Table 1. Discharger Information**

<b>Discharger</b>	<b>City of Santa Rosa</b>
<b>Name of Facility</b>	<b>Santa Rosa Subregional Water Reclamation Facility</b>
<b>Facility Address</b>	<b>4300 Llano Road</b>
	<b>Santa Rosa, CA 95407</b>
	<b>Sonoma County</b>
The United States Environmental Protection Agency and the California Regional Water Quality Control Board, North Coast Region have classified this discharge as a major discharge.	

The discharge by the Santa Rosa Subregional Water Reclamation Facility from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

**Table 2. Discharge Locations**

<b>Discharge Point</b>	<b>Effluent Description</b>	<b>Discharge Point Latitude</b>	<b>Discharge Point Longitude</b>	<b>Receiving Water</b>
002- Arlington Pond	AWT	38 ° , 22' , 39" N	122 ° , 45' , 26" W	Colgan Creek
003- Brown Pond	AWT	38 ° , 24' , 25" N	122 ° , 47' , 49" W	Unnamed Ditch, tributary to Laguna de Santa Rosa
005- LaFranconi Pond	AWT	38 ° , 24' , 20" N	122 ° , 46' , 42" W	Unnamed Ditch, tributary to Laguna de Santa Rosa
006A- Meadow Lane Pond D	AWT	38 ° , 22' , 17" N	122 ° , 46' , 31" W	Laguna de Santa Rosa
006B- Meadow Lane Pond D	AWT	38 ° , 22' , 17" N	122 ° , 46' , 31" W	Laguna de Santa Rosa
008- West College Pond 1C	AWT	38 ° , 26' , 30" N	122 ° , 45' , 49" W	Santa Rosa Creek
009- Ambrosini Pond	AWT	38 ° , 26' , 43" N	122 ° , 47' , 19" W	Santa Rosa Creek
012A- Delta Pond	AWT	38 ° , 26' , 54" N	122 ° , 49' , 27" W	Santa Rosa Creek
012B- Delta Pond	AWT	38 ° , 26' , 54" N	122 ° , 49' , 27" W	Santa Rosa Creek
014- Meadow Lane A Pond	AWT	38 ° , 22' , 17" N	122 ° , 46' , 31" W	Laguna de Santa Rosa
015- Laguna Treatment Plant	AWT	38 ° , 22' , 17" N	122 ° , 46' , 31" W	Laguna de Santa Rosa
016- Laguna Joint Wetlands	AWT	38 ° , 22' , 17" N	122 ° , 46' , 31" W	Laguna de Santa Rosa

**Table 3. Administrative Information**

This Order was adopted by the Regional Water Board on:	<b>September 20, 2006</b>
This Order shall become effective on:	<b>November 9, 2006</b>
This Order shall expire on:	<b>November 9, 2011</b>
The Discharger shall file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, as application for issuance of new waste discharge requirements, not later than:	March 20, 2011

IT IS HEREBY ORDERED, that Order No. 2000-03 (the "Long Range" NPDES Order) is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the federal Clean Water Act, and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, **Catherine E. Kuhlman**, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on September 20, 2006.

  
**Catherine E. Kuhlman**, Executive Officer

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD REGION 1, NORTH COAST REGION

ORDER NO. **R1-2006-0045**  
NPDES NO. **CA0022764**

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## I. FACILITY INFORMATION

The following Discharger is authorized to discharge in accordance with the conditions set forth in this Order:

**Table 4. Facility Information**

<b>Discharger</b>	City of Santa Rosa
<b>Name of Facility</b>	Santa Rosa Subregional Water Reclamation Facility
<b>Facility Address</b>	4300 Llano Road
	Santa Rosa, CA 95407
	Sonoma County
<b>Facility Contact, Title, and Phone</b>	Miles Ferris, Director of Utilities, (707) 543-3930
<b>Mailing Address</b>	69 Stony Circle, Santa Rosa, CA 95401
<b>Type of Facility</b>	Publicly Owned Treatment Works
<b>Facility Design Flow</b>	21.34 MGD, average dry weather flow 64 MGD, peak weekly design flow 47.3 MGD, peak monthly design flow

## II. FINDINGS

The California Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board), finds:

- A. **Background.** The City of Santa Rosa (hereinafter Discharger) is currently discharging under Order No. 2000-03 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0022764, adopted on March 15, 2000. The Discharger submitted a Report of Waste Discharge, dated September 15, 2004 and applied for an NPDES permit renewal to discharge up to 21.34 MGD, Average Dry Weather Flow (ADWF) of treated wastewater from the City of Santa Rosa Subregional Water Reclamation System (hereinafter Subregional System). The application was deemed complete on March 15, 2005.
- B. **Facility Description.** The Discharger owns and operates the Subregional System, a Publicly Owned Treatment Works (POTW) that consists of a wastewater collection system, wastewater treatment facility (WWTF), effluent disposal system, and water recycling facilities. In addition to the wastewater collection system owned and operated by the Discharger, satellite wastewater collection systems individually owned, operated and maintained by the Cities of Cotati, Rohnert Park, and Sebastopol convey wastewater from those communities to the WWTF.

The WWTF consists of grit removal in aerated grit chambers, sludge and scum removal in primary sedimentation tanks, biological secondary treatment (activated sludge) with alum coagulation, flocculation, and clarification followed by tertiary filtration and ultraviolet light disinfection that meet Title 22 guidelines. Biosolids generated during the treatment process are thickened, anaerobically digested, dewatered using belt filters and polymer addition, and beneficially used as soil amendment. Wastewater is discharged from Discharge Points 002, 003, 005, 006A, 006B, 008, 009, 012A, 012B, 014, 015 and 016 (see table on cover page) to the Laguna de Santa Rosa and its tributaries, waters of the United States and tributary to the Russian River within the Russian River Hydrologic Unit (114.00) and its tributaries. Storm water falling within the confines of the composting facility is returned to the treatment facility headworks. The treatment facility currently operates under a Storm Water Pollution Prevention Plan. Attachment B provides a topographic map of the area around the facility. Attachment C provides a flow schematic of the facility.

- C. **Legal Authorities.** This Order is issued pursuant to section 402 of the Federal Clean Water Act (CWA) and implementing regulations adopted by the United States Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the CWC for discharges that are not subject to regulation under CWA section 402.
- D. **Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. Attachment F, which contains background information and rationale for Order requirements, is hereby incorporated

into this Order and, thus, constitute part of the Findings for this Order. Attachments A through G are also incorporated into this Order.

- E. **California Environmental Quality Act (CEQA).** This action to adopt an NPDES permit is exempt from the provisions of the CEQA (Public Resources Code Section 21000, et seq.) in accordance with Section 13389 of the CWC.
- F. **Technology-based Effluent Limitations.** The Code of Federal Regulations (CFR) at 40 CFR §122.44(a) requires that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on tertiary treatment or equivalent requirements that meet both the technology-based secondary treatment standards for POTWs and protect the beneficial uses of the receiving waters and/or are based on best professional judgment pursuant to CWA Section 402(a)(1)(B). The Regional Water Board has considered the factors listed in 40 CFR 125.3(c) and (d) in establishing these requirements. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- G. **Water Quality-based Effluent Limitations.** Section 122.44(d) of 40 CFR requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where numeric water quality objectives have not been established for a pollutant, water quality-based effluent limitations (WQBELs) may be established: (1) using USEPA criteria guidance under CWA Section 304(a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed State criterion or policy interpreting the State's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).
- H. **Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the North Coast Region (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Beneficial uses are designated for all waters in the North Coast Region. The waterbodies are separated into various categories. Wetlands and groundwater are described outside of the Coastal and Inland Waters categories, as they are unique waterbodies that require more detailed descriptions. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 requires that, with certain exceptions, the Regional Water Board assign the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan.

The Basin Plan, Section 2, at page 2-1.00 states that the beneficial uses of any specifically identified water body generally applies to its tributary streams. The Basin Plan does not specifically identify beneficial uses for the Laguna de Santa Rosa, Santa Rosa Creek, and Colgan Creek, but does identify present and potential uses for the Russian River, to which these waterbodies are tributary. Thus, as discussed in detail in the Fact Sheet (Attachment F), beneficial uses applicable to the Laguna de Santa Rosa, Santa Rosa Creek, Colgan Creek and the unnamed ditch, tributary to Laguna de Santa Rosa are as follows:

Discharge Point	Receiving Water Name	Beneficial Use(s)
002	Colgan Creek	<p><u>Existing:</u>  Agricultural supply (AGR); industrial service supply (IND); Ground water recharge (GWR); navigation (NAV); hydropower generation (POW); contact (REC-1) and non-contact (REC-2) water recreation; commercial and Sport fishing (COMM); Warm freshwater habitat (WARM); cold freshwater habitat (COLD); wildlife habitat (WILD); preservation or rare, threatened or endangered species (RARE); freshwater replenishment (FRESH); migration of aquatic organisms (MIGR); spawning, reproduction and/or early development (SPWN); Native American Culture (CUL), subsistence fishing (FISH); Flood peak attenuation/Flood water storage (FLD); Water quality enhancement (WQE).</p> <p><u>Potential:</u>  Municipal and domestic water supply (MUN); industrial process supply (PRO); shellfish harvesting (SHELL); aquaculture (AQUA).</p>
003	Unnamed Ditch, tributary to Laguna de Santa Rosa	
005	Unnamed Ditch, tributary to Laguna de Santa Rosa	
006A, 006B, 007, 014, 015, 016	Laguna de Santa Rosa	
008, 009, 012A, 012B	Santa Rosa Creek	<p><u>Existing:</u>  Municipal and domestic water supply (MUN); agricultural supply (AGR); industrial service supply (IND); Ground water recharge (GWR); navigation (NAV); contact (REC-1) and non-contact (REC-2) water recreation; commercial and Sport fishing (COMM); Warm freshwater habitat (WARM); cold freshwater habitat (COLD); wildlife habitat (WILD); preservation or rare, threatened or endangered species (RARE); migration of aquatic organisms (MIGR); spawning, reproduction and/or early development (SPWN); Native American Culture (CUL), subsistence fishing (FISH), Flood peak attenuation/Flood water storage (FLD), Water quality enhancement (WQE).</p> <p><u>Potential:</u>  Industrial process supply (PRO); hydropower generation (POW); shellfish harvesting (SHELL); aquaculture (AQUA).</p>
	Freshwater Wetlands	<p><u>Existing:</u>  Wetland Habitat (WET);</p> <p><u>Potential:</u>  Municipal and domestic water supply (MUN); agricultural supply (AGR); industrial service supply (IND); Ground water recharge (GWR); freshwater replenishment (FRESH); navigation (NAV); contact (REC-1) and non-contact (REC-2) water recreation; commercial and Sport fishing (COMM); Warm freshwater habitat (WARM); cold freshwater habitat (COLD); wildlife habitat (WILD); preservation or rare, threatened or endangered species (RARE); migration of aquatic organisms (MIGR); spawning, reproduction and/or early development (SPWN); shellfish harvesting (SHELL); estuarine habitat (EST); aquaculture (AQUA); Native American Culture (CUL); Flood peak attenuation/Flood water storage (FLD), Water quality enhancement (WQE).</p>

The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.

Requirements of this Order specifically implement the applicable Water Quality Control Plans.

- I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR, which adopted the NTR criteria that were applicable in California. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- J. **State Implementation Policy.** On March 2, 2000, State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005.
- K. **Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a discharger's request and demonstration that it is infeasible for an existing discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under Section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds one year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order includes compliance schedules and interim effluent limitations and discharge specifications. A detailed discussion of the basis for the compliance schedule(s) and interim effluent limitation(s) and/or discharge specifications is included in the Fact Sheet (Attachment F).
- L. **Antidegradation Policy.** Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16. Resolution 68-16 incorporates federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. As discussed in detail in the Fact Sheet (Attachment F) the permitted discharge is consistent with the antidegradation provision of 40 CFR 131.12 and State Water Board Resolution 68-16.



- M. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. Some effluent limitations in this Order are less stringent than those in the previous Order. As discussed in detail in the Fact Sheet (Attachment F) this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.
- N. Monitoring and Reporting.** NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.
- O. Standard and Special Provisions.** Standard Provisions, which in accordance with 40 CFR 122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet (Attachment F).
- P. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet (Attachment F) of this Order.
- Q. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet (Attachment F) of this Order.

### III. DISCHARGE PROHIBITIONS

- A.** The discharge of any waste not disclosed by the Discharger or not within the reasonable contemplation of the Regional Water Board is prohibited.
- B.** Creation of a pollution, contamination, or nuisance, as defined by CWC Section 13050 is prohibited.
- C.** The discharge of sludge or digester supernatant is prohibited, except as authorized under Section VI.C.6.e. (Solids Disposal and Handling Requirements).
- D.** The discharge or reclamation of untreated or partially treated waste (receiving a lower level of treatment than described in Section II.A of the Fact Sheet) from anywhere within the collection, treatment, or disposal facility is prohibited, except as provided for in Prohibition III.E. and in Attachment D, Standard Provision G (Bypass Provision).

- E. Any sanitary sewer overflow (SSO) that results in a discharge of untreated or partially treated wastewater to (a) waters of the State, (b) groundwater, or (c) land that creates a pollution, contamination, or nuisance as defined in CWC section 13050(m) is prohibited.
- F. The discharge of waste to land that is not owned by or under agreement to use by the Discharger is prohibited except for use for fire suppression as provided in CCR Title 22 section 60307(a) and (b).
- G. The discharge of waste at any point not described in Finding II.B or authorized by any State Water Board or other Regional Water Board permit is prohibited.
- H. The average daily dry weather flow of waste into the Subregional System wastewater treatment facility in excess of 21.34 mgd, as determined from the lowest consecutive 30-day mean daily flow, is prohibited.
- I. The discharge of wastewater effluent from the WWTF to the Russian River or its tributaries is prohibited during the period May 15 through September 30 of each year.
- J. During the period of October 1 through May 14 (discharge season), discharges of recycled water shall not exceed five percent of the flow of the Russian River as measured at Hacienda Bridge (USGS gauge No. 11-4670.00). Compliance with the discharge rate limitations is determined as follows: 1.) the discharge of advanced treated wastewater shall be adjusted daily to avoid exceeding, to the extent practicable, 5% of the previous day's total daily flow of the Russian River as measured by USGS Gauge No. 11-4670.00 at Hacienda Bridge, and 2.) in no case shall the total volume of advanced treated wastewater discharged in a calendar month exceed 5% of the total volume of Russian River flow recorded at the Hacienda Bridge Gauge No. 11-4670.00 in the same calendar month. Daily flow comparisons shall be based on the 24-hour period from 12:01 a.m. to 12:00 midnight. At the beginning of the discharge season, the monthly flow volume comparisons shall be based upon the date when the discharge commenced to the end of the calendar month. At the end of the discharge season, the monthly flow volume comparisons shall be based upon the first day of the calendar month to the date when the discharge is ceased for the season.

#### **IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

##### **A. Effluent Limitations**

###### **1. Final Effluent Limitations**

- a. The discharge of advanced treated wastewater, as defined by the WWTF's treatment design and the numerical limitations below, shall maintain compliance with the following effluent limitations at Discharge Point 015, with compliance measured at Monitoring Location M-001 as described in the attached MRP (Attachment E). The advanced treated wastewater shall be adequately oxidized, filtered [micro-filtered] and disinfected as defined in Title 22, Division 4, Chapter 3, California Code of Regulations (CCR).

**Table 6. Final Technology-based Effluent Limitations**

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
BOD (5-day @ 20°C)	mg/L	10	15	---	---	---
	lbs/day <sup>1</sup>	1,780	2,670	---	---	---
	lbs/day <sup>2</sup>	3,945	8,006	---	---	---
Total Suspended Solids	mg/L	10	15	---	---	---
	lbs/day <sup>1</sup>	1,780	2,670	---	---	---
	lbs/day <sup>2</sup>	3,945	8,006	---	---	---
pH	standard units	---	---	---	6.0	9.0

- b. **Disinfection:** The disinfected effluent, sampled in each of the three effluent discharge channels shall not contain concentrations of total coliform bacteria exceeding the following concentrations:
- The weekly geometric mean concentration of the discharge channels shall not exceed a Most Probable Number (MPN) of 2.2 per 100 milliliters, using the bacteriological results of the last seven days for which analyses have been completed.
  - The number of coliform bacteria shall not exceed an MPN of 23 per 100 milliliters in more than one sample in any 30-day period.
  - No sample shall exceed an MPN of 240 total coliform bacteria per 100 milliliters.
- c. **Percent Removal:** The average monthly percent removal of BOD (5-day, 20°C) and total suspended solids shall not be less than 85 percent. Percent removal shall be determined from the 30-day average value of influent wastewater concentration in comparison to the 30-day average value of effluent concentration for the same constituent over the same time period as measured at Monitoring Location M-001. (CFR 133.101(j))
- d. **Acute Toxicity.** There shall be no acute toxicity in the effluent when discharging to receiving waters, as measured at Monitoring Locations M-001 to M-013. The Discharger will be considered in compliance with this limitation when the survival of aquatic organisms in a 96-hour bioassay of undiluted waste complies with the following:
- Minimum for any one bioassay: 70 percent survival
  - Median for any three consecutive bioassays: at least 90 percent survival

Compliance with the three sample median shall be determined at each monitoring location by calculating the median percent survival of the three most recent consecutive samples meeting all test acceptability criteria collected from Monitoring Locations M-

<sup>1</sup> Mass-based effluent limitations for dry weather conditions are based on the ADWF flow of 21.34 mgd.

<sup>2</sup> During wet weather conditions when the average weekly or average monthly influent flow exceeds 21.34 mgd, mass-based effluent limitations are calculated based on the monthly and weekly wet weather design flows of 47.3 MGD and 64 MGD, respectively.

001 to M-013. All effluent samples shall be collected in accordance with methods described in the MRP.

- e. **Effluent Limitations for Protection of Freshwater Aquatic Life:** During periods of discharge to receiving waters, representative samples of advanced treated wastewater collected at Monitoring Locations M-001 to M-013 shall not contain constituents in excess of the following limits:

**Table 7. Effluent Limitations for Protection of Aquatic Life**

.Parameter	Units	Effluent Limitations <sup>3</sup>				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper	µg/L	SEE ATTACHMENT E-2	--	SEE ATTACHMENT E-2	--	--
Lead	µg/L	SEE ATTACHMENT E-3	--	SEE ATTACHMENT E-3	--	--
Nickel	µg/L	SEE ATTACHMENT E-4	--	SEE ATTACHMENT E-4	--	--
Cyanide	µg/L	3.05	--	9.23	--	--

- f. **Effluent Limitations for Protection of Human Health:** During periods of discharge to receiving waters, representative samples of advanced treated wastewater collected at Monitoring Locations M-001 to M-013 shall not contain constituents in excess of the following limits:

**Table 8. Effluent Limitations for Protection of Human Health**

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Nitrate <sup>4</sup>	mg/L as N	10.0	--	---	--	--

- g. **Effluent Limitations for Biostimulatory Substances for Compliance with Narrative Objective.** The Regional Board plans to develop and adopt total maximum daily loads (TMDLs) for nitrogen and phosphorus which will specify wasteload allocations (WLAs) for point sources and load allocations (LA) for non-point sources, as appropriate. Following the adoption of these TMDLs by the Regional Water Board, this Order will be issued with final QBELs based on applicable WLAs. Alternatively, in the absence of a

<sup>3</sup> Effluent limitations for copper, lead, and nickel are for the total recoverable metal fraction and are determined using formulas that are based on the hardness of the receiving water at the time the discharge is sampled.

<sup>4</sup> If, as a result of a nutrient TMDL for the Laguna de Santa Rosa, a WLA for nitrate or total nitrogen is numerically lower than 10.0 mg/l (as N), then the final QBELs for nitrate will be determined by an approved TMDL for the Laguna de Santa Rosa or will be zero (i.e., “no net loading”).

TMDL at the end of the compliance schedule authorized by this Order, the final effluent limitation for nitrogen and phosphorus will be zero, or no net loading<sup>5</sup>.

## 2. Interim Effluent Limitations

- a. Beginning on the effective date of this Order and ending no later than April 30, 2010, the discharge of advanced treated wastewater shall maintain compliance with the following limitations at Monitoring Locations M-001 to M-013, as described in the attached MRP (Attachment E). These interim effluent limitations shall apply in lieu of the corresponding final effluent limitations specified for the same parameters during the time period indicated in this Order.

**Table 9. Effluent Limitations for Protection of Aquatic Life**

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper	µg/L	16.3	--	--	--	--
Lead	µg/L	5.6	--	--	--	--
Cyanide	µg/L	14.3	--	--	--	--

- b. Beginning on the effective date of this Order and ending no later than November 9, 2011, the discharge of advanced treated wastewater shall maintain compliance with the following limitations at Monitoring Locations M-001 to M-013, as described in the attached MRP (Attachment E). These interim effluent limitations shall apply in lieu of the corresponding final effluent limitations specified for the same parameters during the time period indicated in section IV.A.1.g of this Order.

**Table 10. Effluent Limitations for Protection of Human Health**

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Nitrate	mg/L as N	12.9	--	---	--	--

- c. Beginning on the effective date of this Order and ending no later than November 9, 2011, the discharge of advanced treated wastewater shall maintain compliance with the following limitations at Monitoring Locations M-001 to M-013, as described in the attached MRP (Attachment E). These interim effluent limitations shall apply in lieu of

<sup>5</sup> A "no net loading" effluent limit may be met by: 1) reducing the effluent concentration below detectable levels through source control and/or treatment; 2) reducing loads through recycling/reclamation; and/or 3) reducing loads elsewhere in the watershed by an amount at least equal to the amount discharged (and of equivalent bioavailability) through an approved offset program.

the corresponding final effluent limitations specified for the same parameters during the time period indicated in this Order.

**Table 11. Effluent Limitations for Biostimulatory Substances**

Parameter	Units	Effluent Limitations				
		Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Total Phosphate	mg/L	3.1	--	---	--	--
Total Kjeldahl Nitrogen	mg/L	3.0	--	---	--	--

- d. Beginning on the effective date of this Order and ending no later than November 9, 2011, the mass emission rate of the discharge of Total Nitrogen<sup>6</sup> shall not exceed 270,336 lbs in any discharge season. The mass emission rate of the discharge of Total Phosphate shall not exceed 48,142 lbs in any discharge season. These interim effluent limitations shall apply in lieu of the corresponding final effluent limitations specified for biostimulants during the time period indicated in Section IV.A.1 of this Order.

## B. Land Discharge Specifications

This section of the standardized Order template is not applicable to the Santa Rosa Subregional Water Reclamation System as treated wastewater is not discharged or applied to land for the purpose of disposal.

## C. Reclamation Specifications

In addition to the following, the Discharger shall comply with Water Reclamation requirements and Provisions contained in Attachment G of this Order.

- Filtration Rate.** The rate of filtration through the tertiary filters shall not exceed 5 gallons per minute per square foot of surface area.
- Turbidity.** The effluent from the filtration system shall at all times be filtered such that the filtered effluent meets the following specifications prior to discharge to the disinfection unit:
  - An average of 2 Nephelometric Turbidity Units (NTU) during any 24-hour period;
  - 5 NTU more than 5 percent of the time during any 24-hour period; and
  - 10 NTU at any time.
- Reclamation Capacity.** The Discharger shall maintain, at a minimum, a total reclamation capacity of 4,015 million gallons for Geysers recharge, and maintain the capability to irrigate 2,590 million gallons per year at 21.34 mgd average dry weather flow.

<sup>6</sup> Total Nitrogen means the sum of ammonia-nitrogen, nitrate-nitrogen, nitrite-nitrogen, and organic nitrogen.

4. **Reclamation Alternatives.** The Discharger shall utilize all reasonable alternatives for reclamation. "Reasonable alternatives" for reclamation include, but are not limited to: full use of existing irrigation capacity; seeking additional irrigation capacity to the extent that storage capacity increases; and sending additional discharges to the Geysers steamfields during extreme weather conditions.
5. **Reclamation Operation.** The Discharger shall operate recycled water storage and disposal according to the *Geysers Discharge Management Plan*, submitted in October 2003 and approved by the Executive Officer, as may be amended and subsequently approved by the Executive Officer, from time to time.

## V. RECEIVING WATER LIMITATIONS

### A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. Compliance with receiving water limitations shall be measured at monitoring locations described in the MRP (Attachment E). The discharge shall not cause the following:

1. The discharge shall not cause the dissolved oxygen concentration of the receiving waters to be depressed below 7.0 mg/l. In the event that the receiving waters are determined to have dissolved oxygen concentration of less than 7.0 mg/l, the discharge shall not depress the dissolved oxygen concentration below the existing level.
2. The discharge shall not cause the pH of the receiving waters to be depressed below 6.5 nor raised above 8.5. Within this range, the discharge shall not cause the pH of the receiving waters to be changed at any time more than 0.5 units from that which occurs naturally. If the pH of the receiving water is less than 6.5, the discharge shall not cause a further depression of the pH of the receiving water. If the pH of the receiving water is greater than 8.5, the discharge shall not cause a further increase in the pH of the receiving water.
3. The discharge shall not cause the turbidity of the receiving waters to be increased more than 20 percent above naturally occurring background levels.
4. The discharge shall not cause the receiving waters to contain floating materials, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
5. The discharge shall not cause the receiving waters to contain taste or odor producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, that cause nuisance, or that adversely affect beneficial uses.
6. The discharge of waste shall not cause coloration of the receiving waters that causes nuisance or adversely affects beneficial uses.

7. The discharge shall not cause bottom deposits in the receiving waters to the extent that such deposits cause nuisance or adversely affect beneficial uses.
8. The discharge shall not cause or contribute to receiving water concentrations of biostimulants that promote objectionable aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses of the receiving waters.
9. The discharge shall not cause the receiving waters to contain toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in humans, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Water Board.
10. The following temperature limitations apply to the discharge to the receiving waters:
  - a. When the receiving water is below 58°F, the discharge shall cause an increase of no more than 4°F in the receiving water, and shall not increase the temperature of the receiving water beyond 59°F. No instantaneous increase in receiving water temperature shall exceed 4°F at any time.
  - b. When the receiving water is between 59°F and 67°F, the discharge shall cause an increase of no more than 1°F in the receiving water. No instantaneous increase in receiving water temperature shall exceed 1°F at any time.
  - c. When the receiving water is above 68°F, the discharge shall not cause an increase in temperature of the receiving water.
11. The discharge shall not cause an individual pesticide or combination of pesticides to be present in concentrations that adversely affect beneficial uses. The discharge must not cause bioaccumulation of pesticide, fungicide, wood treatment chemical, or other toxic pollutant concentrations in bottom sediments or aquatic life to levels which are harmful to human health. The discharge shall not cause the receiving waters to contain concentrations of pesticides in excess of the limiting concentrations set forth in Table 3-2 of the Basin Plan.
12. The discharge must not cause the receiving waters to contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water that cause nuisance or that otherwise adversely affect beneficial uses.
13. This discharge must not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Water Board or the State Water Board as required by the Federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the CWA, or



amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.

14. The discharge shall not cause concentrations of chemical constituents to occur in excess of limits specified in Table 3-2 of the Basin Plan or in excess of more stringent Maximum Contaminant Levels (MCLs) established for these pollutants in Title 22, Division 4, Chapter 15, Articles 4 and 5.5 of the CCR.

## **B. Groundwater Limitations**

1. The collection, storage, and use of wastewater or recycled water shall not cause or contribute to a statistically significant degradation of groundwater quality.
2. The collection, storage, and use of wastewater shall not cause groundwater to contain taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.

## **VI. PROVISIONS**

### **A. Standard Provisions**

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
2. **Regional Water Board Standard Provisions.** There are no applicable Regional Water Board standard provisions.

### **B. Monitoring and Reporting Program Requirements**

1. The Discharger shall comply with the Monitoring and Reporting Program, and future revisions thereto, in Attachment E of this Order.
2. The Discharger may submit a proposal to monitor receiving water at locations different than receiving water locations specified in section VIII of the MRP. The proposal must be received by the Executive Officer within 180 days of the effective date of this Order and specify monitoring locations that are acceptable to the Executive Officer for the purpose of demonstrating compliance with this Order. The Executive Officer will inform the Discharger within 90 days after receipt of the proposal whether the alternative monitoring locations are acceptable. In the interim, the Discharger shall comply with interim receiving water monitoring requirements using interim receiving water monitoring locations, as specified in Attachment E-5 of the MRP. If an acceptable alternative proposal is not timely received and approved by the Executive Officer, the downstream receiving water monitoring locations specified in the MRP (section VIII) shall replace interim receiving water monitoring locations in Attachment E-5 effective immediately.

## C. Special Provisions

### 1. Reopener Provisions

- a. **Standards Revisions.** If applicable water quality standards are promulgated or approved pursuant to Section 303 of the CWA, or amendments thereto, the Regional Water Board may reopen this Order and make modifications in accordance with such revised standards.
- b. **Reasonable Potential.** The Regional Water Board may modify, or revoke and reissue, this Order if present or future investigations demonstrate that the discharge governed by this Order has the reasonable potential to cause or contribute to excursions above any applicable priority pollutant criterion or objective or adversely impacting water quality and/or the beneficial uses of receiving waters.
- c. **Whole Effluent Toxicity.** As a result of a Toxicity Reduction Evaluation (TRE), this Order may be reopened to include a chronic toxicity limitation, a new acute toxicity limitation, and/or a limitation for a specific toxicant identified in the TRE. Additionally, if a numeric chronic toxicity water quality objective is adopted by the State Water Board, this Order may be reopened to include a numeric chronic toxicity effluent limitation based on that objective.
- d. **303(d)-Listed Pollutants.** If an applicable TMDL program is adopted, this Order may be reopened and the effluent limitations for the pollutant or pollutants that are the subject of the TMDL modified or an effluent concentration limitation imposed to conform this Order to the TMDL requirements. If the Regional Water Board determines that a voluntary offset program is feasible for and desired by the Discharger, then this Order may be reopened to reevaluate the effluent limitations for the pollutant or pollutants that are the subject of the TMDL and, if appropriate, to incorporate provisions recognizing the Discharger's participation in an offset program.
- e. **Filter Loading Rate.** The Discharger is participating in a study being conducted by the California Department of Health Services (DHS) regarding filter loading rates for filtered wastewater. This Order may be reopened and modified to incorporate a revised filter loading rate in the event that DHS revises Title 22 regulations to require a different filter loading rate as a result of the study.
- f. **Special Studies.** If a water effect ratio, mixing zone, or other water quality study provides new information and a basis for determining that a permit condition or conditions should be modified, the Regional Water Board may reopen this Order and make modifications in accordance with 40 CFR 122.62.
- g. **Alternative Final Limitations for Biostimulants.** If the Discharger completes a special study justifying alternative final numerical limitations for biostimulants that demonstrates that the discharge, if alternative limitations are allowed, will not cause, or have the potential to cause or contribute to an excursion of applicable water quality objectives for

biostimulants in the Laguna de Santa Rosa or its tributaries, the Regional Water Board may reopen this Order and make modifications in accordance with 40 CFR 122.62.

## 2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. **Whole Effluent Toxicity.** In addition to a limitation for whole effluent acute toxicity, the Monitoring and Reporting Program (MRP) of this Order requires routine monitoring for whole effluent chronic toxicity to determine compliance with the Basin Plan's narrative water quality objective for toxicity. As established by the MRP, if either the acute toxicity effluent limitation or a chronic toxicity monitoring trigger of 1.0 TUC is exceeded, the Discharger shall conduct accelerated toxicity monitoring. Results of accelerated toxicity monitoring will indicate a need to conduct a Toxicity Reduction Evaluation (TRE), if toxicity persists; or it will indicate that a return to routine toxicity monitoring is justified because persistent toxicity has not been identified by accelerated monitoring. TREs shall be conducted in accordance with the TRE Workplan prepared by the Discharger pursuant to Section VI. C. 2. b of this Order, below.
- b. **Toxicity Reduction Evaluations (TRE) Workplan.** The Discharger shall prepare and submit to the Regional Water Board Executive Officer a TRE workplan within **180 days of the effective date of this Order**. This plan shall be reviewed and updated as necessary in order to remain current and applicable to the discharge and discharge facilities. The workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at least the following items:
  - i. A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.
  - ii. A description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices.
  - iii. If a toxicity identification evaluation (TIE) is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor).
- c. **Toxicity Reduction Evaluations (TRE).** The TRE shall be conducted in accordance with the following:
  - i. The TRE shall be initiated within 30 days of the date of completion of the accelerated monitoring test, required by Section V of the MRP, observed to exceed either the acute or chronic toxicity parameter.
  - ii. The TRE shall be conducted in accordance with the Discharger's workplan.
  - iii. The TRE shall be in accordance with current technical guidance and reference material including, at a minimum, the USEPA manual EPA/833B-99/002.

- iv. The TRE may end at any stage if, through monitoring results, it is determined that there is no longer consistent toxicity.
  - v. The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. As guidance, the Discharger shall use the USEPA acute and chronic manuals, EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III).
  - vi. As toxic substances are identified or characterized, the Discharger shall continue the TRE by determining the source(s) and evaluating alternative strategies for reducing or eliminating the substances from the discharge. All reasonable steps shall be taken to reduce toxicity to levels consistent with chronic toxicity parameters.
  - vii. Many recommended TRE elements accompany required efforts of source control, pollution prevention, and storm water control programs. TRE efforts should be coordinated with such efforts. To prevent duplication of efforts, evidence of complying with requirements of recommendations of such programs may be acceptable to comply with requirements of the TRE.
  - viii. The Regional Water Board recognizes that chronic toxicity may be episodic and identification of a reduction of sources of chronic toxicity may not be successful in all cases. Consideration of enforcement action by the Regional Water Board will be based in part on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.
- d. **Groundwater Monitoring Program.** The Discharger shall prepare and submit for approval by Regional Water Board Executive Officer a Groundwater Monitoring Program for its Water Reclamation System **within 180 days of the effective date of this Order.** The Program shall be of sufficient scope to demonstrate that the discharge of treated wastewater to the Discharger's land irrigation system is in compliance with this Order.
- e. **Storage Pond Leak Monitoring Program.** The Discharger shall prepare and submit for approval by Regional Water Board Executive Officer a Storage Pond Leak Monitoring Program **within 180 days of the effective date of this Order.** The Program shall be of sufficient scope to demonstrate that storage of treated wastewater within the Subregional System is not degrading groundwater quality or causing or contributing to excursions of applicable water quality objectives in groundwater or surface water.

### 3. Best Management Practices and Pollution Prevention

- a. **Pollutant Minimization Program.** The Discharger shall, as required by the Executive Officer, prepare a Pollutant Minimization Program in accordance with section 2.4.5.1 of the SIP when there is evidence (e.g., sample results reported as Detected, but Not

Quantified (DNQ) when the effluent limitation is less than the Method Detection Limit (MDL), sample results from analytical methods more sensitive than those methods included in the permit, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

- i. A sample result is reported as DNQ and the effluent limitation is less than the Reporting Limit (RL); or
- ii. A sample result is reported as Not Detected (ND) and the effluent limitation is less than the MDL.

#### 4. Compliance Schedules

##### a. Compliance Schedule for Final Effluent Limitations for Copper and Lead

- i. **By June 1, 2007**, the Discharger shall complete an evaluation to determine potential sources of copper and lead.
- ii. **By December 1, 2007**, the Discharger shall complete an evaluation of pretreatment local limits for copper and lead and, if appropriate, revise local limits, implemented pursuant to its Pretreatment program, based on identified sources.
- iii. **By June 1, 2008**, the Discharger shall update its source control program, if necessary, to reflect any revision local limits. This step will include providing a period of time to allow industrial users to come into compliance with their new limits.
- iv. **By May 31, 2009**, the Discharger shall evaluate compliance with new local limits and evaluate whether further copper or lead reductions are necessary.
- v. **By December 1, 2009**, the Discharger shall, if necessary, complete an engineering treatment feasibility studies examining the feasibility, costs and benefits of different treatment options that may be required to remove copper and lead.
- vi. **By May 1, 2010**, the Discharger shall comply with the final effluent limitations for copper and lead. On July 6, 2005, the Discharger submitted a compliance schedule justification for these constituents. The compliance schedule justification included all items specified in Paragraph 3, items (a) through (d), of section 2.1 of the SIP. As this compliance schedule is greater than one year, the Discharger shall submit semi-annual progress reports in accordance with the Monitoring and Reporting Program (Attachment E, Section X.D.1.)

##### b. Compliance Schedule for Final Effluent Limitations for Cyanide

- i. **By November 1, 2007**, the Discharger shall complete an evaluation of analytical methodology for cyanide.

- ii. **By November 1, 2007**, the Discharger shall complete an evaluation of the effect of thiocyanate in its influent and its contribution to total cyanide in its effluent.
- iii. **By November 1, 2008**, the Discharger shall complete an evaluation to determine potential industrial users of thiocyanate.
- iv. **By November 1, 2009**, the Discharger shall, if necessary, develop and implement a source control program to control thiocyanate in its influent.
- v. **By May 1, 2010**, the Discharger shall comply with the final effluent limitations for cyanide. On July 6, 2005, the Discharger submitted a compliance schedule justification for these constituents. The compliance schedule justification included all items specified in Paragraph 3, items (a) through (d), of section 2.1 of the SIP. As this compliance schedule is greater than one year, the Discharger shall submit semi-annual progress reports in accordance with the Monitoring and Reporting Program (Attachment E, Section X.D.1.)

**c. Compliance Schedule for Final Effluent Limitations for Nitrate**

- i. **By May 20, 2007**, the Discharger shall submit a written progress report summarizing 1) the status of the preliminary treatment plant improvement evaluations, the treatment plant optimization evaluation, and the mixing zone evaluation, and 2) the status of source control efforts to reduce nitrate loading in the Laguna de Santa Rosa.
- ii. **By February 20, 2008**, the Discharger shall submit 1) a report describing the status of source control efforts to reduce nitrate loading in the Laguna de Santa Rosa, 2) the findings of the treatment plant improvement and optimization evaluations and the preliminary mixing zone evaluation, and 3) any additional efforts to meet final limitations.
- iii. **By September 20, 2008**, the Discharger shall submit a written progress report discussing its progress in complying with final effluent limitations. A progress report shall be submitted by September 20 of each year thereafter, until September 20, 2011. The Discharger shall comply with final effluent limitations for nitrate by **November 9, 2011**.

**d. Compliance Schedule for Final Effluent Limitations for Biostimulatory Substances**

- i. **By September 20 of each year, beginning in 2007**, the Discharger shall submit a written progress report on its progress in complying with final effluent limitations for biostimulatory substances. This annual report shall include, but not be limited to,
  - 1) the identification of feasible treatment improvements, water recycling efforts, stormwater programs, pretreatment limitations, nonpoint source assistance programs, and other water diversion programs, such as the Geysers Recharge Project, that the City has undertaken during the previous 12 months to reduce the effluent nitrogen concentration and mass nutrient loading to the Laguna de Santa Rosa.

- 2) A demonstration that the activities and programs identified above have resulted in a measurable reduction in nutrient loading to the Laguna de Santa Rosa.
- 3) Additional activities planned by the City to reduce nutrient loading in the Laguna for the coming year.

**5. Operation and Maintenance Specifications**

- a. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with this Order. Proper operation and maintenance includes adequate laboratory quality control and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger only when necessary to achieve compliance with the conditions of this Order. [40 CFR 122.41(e)]
- b. The Discharger shall maintain an updated Operation and Maintenance (O&M) Manual for the Facility. The Discharger shall update the O&M Manual, as necessary, to conform with changes in operation and maintenance of the Facility. The O&M Manual shall be readily available to operating personnel onsite. The O&M Manual shall include the following:
  - i. Description of the treatment plant table of organization showing the number of employees, duties and qualifications and plant attendance schedules (daily, weekends and holidays, part-time, etc). The description should include documentation that the personnel are knowledgeable and qualified to operate the treatment facility so as to achieve the required level of treatment at all times.
  - ii. Detailed description of safe and effective operation and maintenance of treatment processes, process control instrumentation and equipment.
  - iii. Description of laboratory and quality assurance procedures.
  - iv. Process and equipment inspection and maintenance schedules.
  - v. Description of safeguards to assure that, should there be reduction, loss, or failure of electric power, the Discharger will be able to comply with requirements of this Order.
  - vi. Description of preventive (fail-safe) and contingency (response and cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. These plans shall identify the possible sources (such as loading and storage areas, power outage, waste treatment unit failure, process equipment failure, tank and piping failure) of accidental discharges, untreated or partially treated waste bypass, and polluted drainage.

## 6. Special Provisions for Municipal Facilities (POTWs Only)

### a. Wastewater Collection Systems

#### i. Statewide General WDRs for Sanitary Sewer Systems

On May 2, 2006, the State Water Board adopted State Water Board Order 2006-0003, a Statewide General WDRs for Sanitary Sewer Systems. The Discharger shall be subject to the requirements of Order 2006-0003 and any future revisions thereto. Order 2006-0003 requires that all public agencies that currently own or operate sanitary sewer systems apply for coverage under the General WDRs within six months. Therefore, **by November 2, 2006**, the Discharger shall apply for coverage under State Water Board Order 2006-0003 for operation of its wastewater collection system.

In addition to the coverage obtained under Order 2006-0003, the Discharger's collection system is also part of the treatment system that is subject to this Order. As such, pursuant to federal regulations, the Discharger must properly operate and maintain its collection system [40 CFR section 122.41(e)], report any non-compliance [40 CFR section 122.41(l)(6) and (7)], and mitigate any discharge from the collection system in violation of this Order [40 CFR. section 122.41(d)].

#### ii. Sanitary Sewer Overflows

The written report requirements as specified below in this subsection shall terminate when the Discharger obtains coverage under Order No. 2006-0003-DWQ and commences electronic and/or telefax reporting of sanitary sewer overflows pursuant to Provision D.15 and General Monitoring and Reporting Requirement G.2 of Order No. 2006-0003-DWQ and Monitoring and Reporting Program No. 2006-0003-DWQ. Oral reporting<sup>7</sup> of SSOs as specified below in this subsection shall continue through the term of this Order.

Sanitary Sewer Overflows (SSOs) shall be reported orally and in writing to the Regional Water Board staff in accordance with the following:

- a. SSOs in excess of 1,000 gallons or any SSO that results in sewage reaching surface waters, or if it is likely that more than 1,000 gallons has escaped the collection system, shall be reported immediately by telephone. A written description of the event shall be submitted with the monthly monitoring report.

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<sup>7</sup> Oral reporting means direct contact with a Regional Water Board staff person. The oral report may be given in person or by telephone. After business hours, oral contact must be made by calling the State Office of Emergency Services or the Regional Water Board spill officer.



- b. SSOs that result in a sewage spill between 100 gallons and 1,000 gallons that does not reach a waterway shall be reported orally within 24 hours. A written description of the event shall be submitted with the next monthly monitoring report.
- c. Information to be provided orally includes:
  - 1) Name and contact information of caller.
  - 2) Date, time and location of SSO occurrence.
  - 3) Estimates of spill volume, rate of flow, and spill duration.
  - 4) Surface water bodies impacted.
  - 5) Cause of spill.
  - 6) Cleanup actions taken or repairs made.
  - 7) Responding agencies.
- d. Information to be provided in writing includes:
  - 1) Information provided in verbal notification.
  - 2) Other agencies notified by phone.
  - 3) Detailed description of cleanup actions and repairs taken.
  - 4) Description of actions that will be taken to minimize or prevent future spills.

**b. Pretreatment of Industrial Waste**

- i. The Discharger shall be responsible for the performance of all pretreatment requirements contained in 40 CFR Part 403 and shall be subject to enforcement actions, penalties, fines and other remedies by the USEPA or other appropriate parties as provided in the CWA, as amended (33 USC 1351 et seq.). The Discharger shall implement and enforce its approved Wastewater Treatment Facility (WWTF) Pretreatment Program. The Discharger's approved WWTF Pretreatment Program is hereby made an enforceable condition of this Permit. USEPA may initiate enforcement action against an industrial user for noncompliance with applicable standards and requirements as provided in the CWA.
- ii. The Discharger shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d) and 402(d) of the CWA. The Discharger shall cause industrial users subject to Federal Categorical Standards to achieve compliance no later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge.
- iii. The Discharger shall perform the pretreatment functions as required in 40 CFR Part 403 including, but not limited to:
  - a. Implement the necessary legal authorities as provided in 40 CFR 403.8(f)(1);
  - b. Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;
  - c. Implement the programmatic functions as provided in 40 CFR 403.8(f)(2); and
  - d. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 403.8(f)(3).

**c. Sludge Disposal and Handling Requirements**

- i. Sludge, as used in this document, means the solid, semisolid, and liquid residues removed during primary, secondary, or advanced wastewater treatment processes. Solid waste refers to grit and screenings generated during preliminary treatment. Biosolids refers to sludge that has been treated and tested and shown to be capable of being beneficially and legally used pursuant to federal and state regulations as a soil amendment for agriculture, silviculture, horticulture, and land reclamation activities.
- ii. All collected sludges and other solid waste removed from liquid wastes shall be removed from screens, sumps, ponds, and tanks as needed to ensure optimal plant operation and disposed of in accordance with applicable federal and state regulations.
- iii. The use and disposal of biosolids shall comply with all the requirements in 40 CFR 503, which are enforceable by the USEPA, not the Regional Water Board. If during the life of this Order, the State accepts primacy for implementation of 40 CFR 503, the Regional Water Board may also initiate enforcement where appropriate.
- iv. Sludge or biosolids that are disposed of in a municipal solid waste landfill or used as landfill daily cover shall meet the applicable requirements of 40 CFR 258. In the annual self-monitoring report, the Discharger shall include the amount of sludge or biosolids disposed of, and the landfill(s) which received the sludge or biosolids.
- v. The beneficial use of biosolids by application to land as soil amendment is not covered or authorized by this Permit. Class B biosolids that are applied to land as soil amendment by the Discharger within the North Coast Region shall comply with State Water Board Water Quality Order No. 2000-10-DWQ (General Waste Discharge Requirements for the Discharge of Biosolids to Land as a Soil Amendment in Agricultural, Silvicultural, Horticultural, and Land Reclamation Activities (General Order) or other WDRs issued by the Regional Water Board.
- vi. The Discharger shall take all reasonable steps to prevent and minimize any sludge use or disposal in violation of this Order that has a likelihood of adversely affecting human health or the environment.
- vii. Solids and sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, and shall not result in groundwater contamination.
- viii. The solids and sludge treatment and storage site shall have facilities adequate to divert surface water runoff from adjacent areas, to protect the boundaries of the site from erosion, and to prevent drainage from the treatment and storage site. Adequate protection is defined as protection from at least a 100-year storm.

- viii The discharge of sewage sludge, biosolids and other waste solids shall not cause waste material to be in a position where it is, or can be, conveyed from the treatment and storage sites and deposited in the waters of the state.
- d. Discharge Notification.** The Discharger shall notify the Regional Water Board orally in the event that discharge to surface waters is expected to occur when the flow in the Russian River as measured at Hacienda Bridge (USGS gauge No. 11-4670.00) has not reached 1,000 cubic feet per second.
- e. Operator Certification.** Supervisors and operators of municipal WWTFs shall possess a certificate of appropriate grade in accordance with Title 23, CCR, section 3680. The State Water Board may accept experience in lieu of qualification training. In lieu of a properly certified WWTF operator, the State Water Board may approve use of a water treatment plant operator of appropriate grade certified by the DHS where water reclamation is involved
- f. Adequate Capacity.** Whenever a WWTF will reach capacity within four years, the Discharger shall notify the Regional Water Board. A copy of such notification shall be sent to appropriate local elected officials, local permitting agencies, and the press. Factors to be evaluated in assessing reserve capacity shall include, at a minimum, (1) comparison of the wet weather design flow with the highest daily flow, and (2) comparison of the average dry weather design flow with the lowest monthly flow. The Discharger shall demonstrate that adequate steps are being taken to address the capacity problem. The Discharger shall submit a technical report to the Regional Water Board showing how flow volumes will be prevented from exceeding capacity, or how capacity will be increased, within 120 days after providing notification to the Regional Water Board, or within 120 days after receipt of Regional Water Board notification, that the WWTF will reach capacity within four years. The time for filing the required technical report may be extended by the Regional Water Board. An extension of 30 days may be granted by the Executive Officer, and longer extensions may be granted by the Regional Water Board itself. [CCR Title 23, Section 2232]

## **VII. COMPLIANCE DETERMINATION**

Compliance with the effluent limitations contained in Section IV of this Order will be determined as specified below:

### **A. General.**

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Appendix A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

### **B. Multiple Sample Data Reduction.**

When determining compliance with an AMEL for priority pollutants and more than one sample result is available in a month, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of “Detected, but Not Quantified” (DNQ) or “Not Detected” (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

### **C. Average Monthly Effluent Limitation (AMEL).**

When less than daily monitoring is required, the monthly average shall be determined by summing the daily values and dividing by the number of days during the calendar month when monitoring occurred. If only one sample is collected in a calendar month, the value of the single sample shall constitute the monthly average.

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. For purposes of Mandatory Minimum Penalties, a violation of an AMEL will be considered as one violation. Depending on the nature

of the violation, the Regional Water Board may, however, pursue discretionary civil penalties for the remaining days of violation. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

**D. Average Weekly Effluent Limitation (AWEL).**

When less than daily monitoring is required, the weekly average shall be determined by summing the daily values and dividing by the number of days during the calendar week when monitoring occurred. If only one sample is collected in a calendar week, the value of the single sample shall constitute the weekly average. For any one calendar week during which no sample is taken, no compliance determination can be made for that calendar week.

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. For purposes of Mandatory Minimum Penalties, a violation of an AWEL will be considered as one violation. Depending on the nature of the violation, the Regional Water Board may, however, pursue discretionary civil penalties for the remaining days of violation. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

**E. Maximum Daily Effluent Limitation (MDEL).**

If a daily discharge exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

**F. Instantaneous Minimum Effluent Limitation.**

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

**G. Instantaneous Maximum Effluent Limitation.**

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately

(e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

## ATTACHMENT A – DEFINITIONS

**Arithmetic Mean ( $\mu$ ):** is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean =  $\mu = \Sigma x / n$       where:  $\Sigma x$  is the sum of the measured ambient water concentrations, and  $n$  is the number of samples.

**Average Monthly Effluent Limitation (AMEL):** the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

**Average Weekly Effluent Limitation (AWEL):** the highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

**Bioaccumulative:** pollutants are those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

**Coefficient of Variation (CV):** is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

**Daily Discharge:** Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

**Detected, but Not Quantified (DNQ):** are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

**Effluent Concentration Allowance (ECA):** is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in

USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

**Estimated Chemical Concentration:** is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

**Instantaneous Maximum Effluent Limitation:** the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

**Instantaneous Minimum Effluent Limitation:** the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

**Maximum Daily Flow** is the maximum flow sample of all samples collected in a calendar day.

**Maximum Daily Effluent Limitation (MDEL)** means the highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

**Median:** is the middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements ( $n$ ) is odd, then the median =  $X_{(n+1)/2}$ . If  $n$  is even, then the median =  $(X_{n/2} + X_{(n/2)+1})/2$  (i.e., the midpoint between the  $n/2$  and  $n/2+1$ ).

**Method Detection Limit (MDL):** is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 CFR Part 136, Appendix B, revised as of May 14, 1999.

**Minimum Level (ML):** is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

**Mixing Zone:** is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

**Not Detected (ND):** are those sample results less than the laboratory's MDL.

**Pollutant Minimization:** means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses.



**Pollution Prevention:** means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in CWC Section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the SWRCB or RWQCB.

**Reporting Level (RL):** is the ML corresponding to an approved analytical method for reporting a sample result that is selected either from Appendix 4 of the SIP by the Regional Water Board in accordance with Section 2.4.2 of the SIP or established in accordance with Section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

## ATTACHMENT B – TOPOGRAPHIC MAP

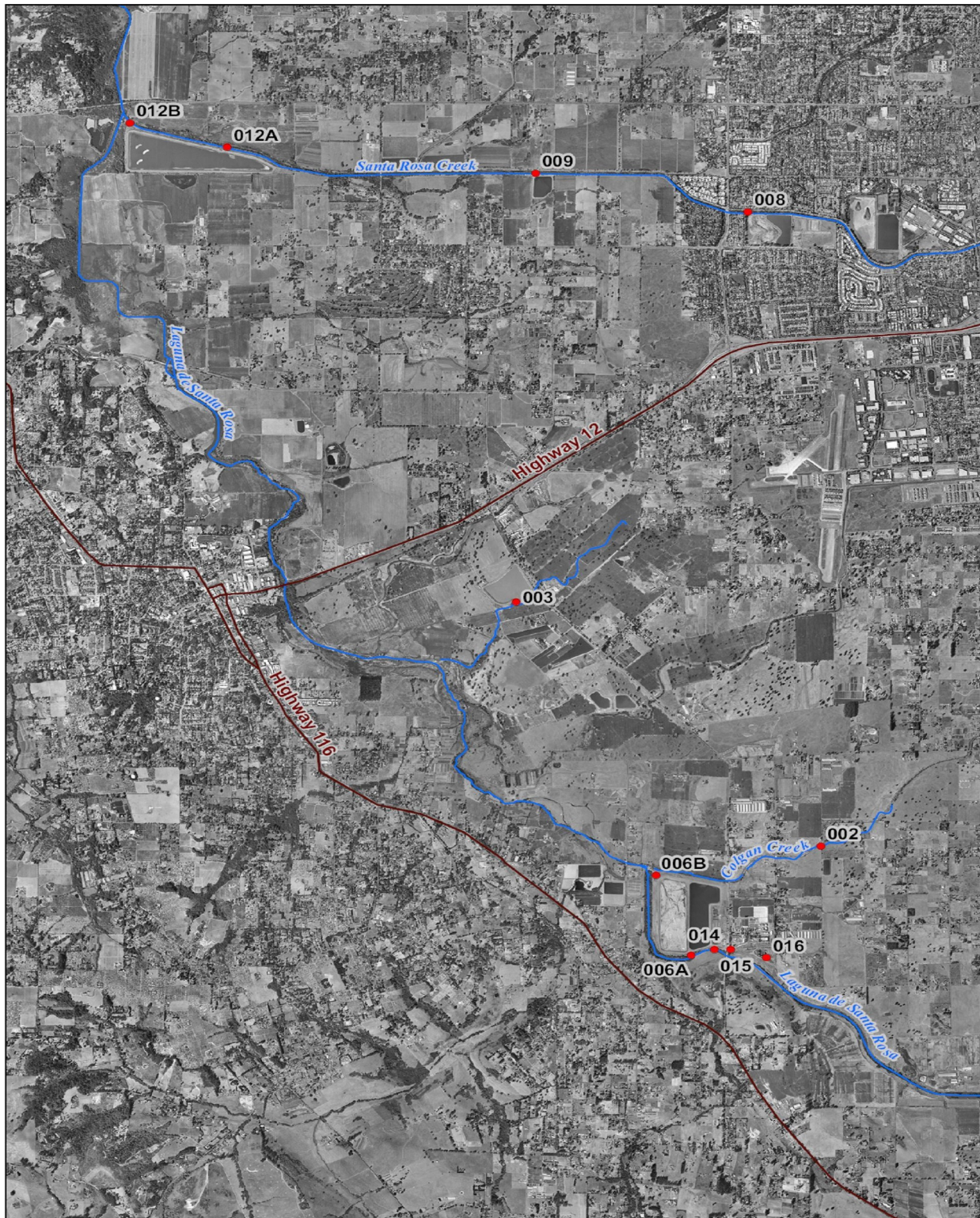
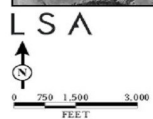


FIGURE 1

Santa Rosa Subregional  
Water Reclamation System  
Discharge Locations



- DISCHARGE LOCATION
- RIVERS AND STREAMS
- MAJOR ROADS

# ATTACHMENT C – FLOW SCHEMATIC

ATTACHMENT C – FLOW SCHEMATIC

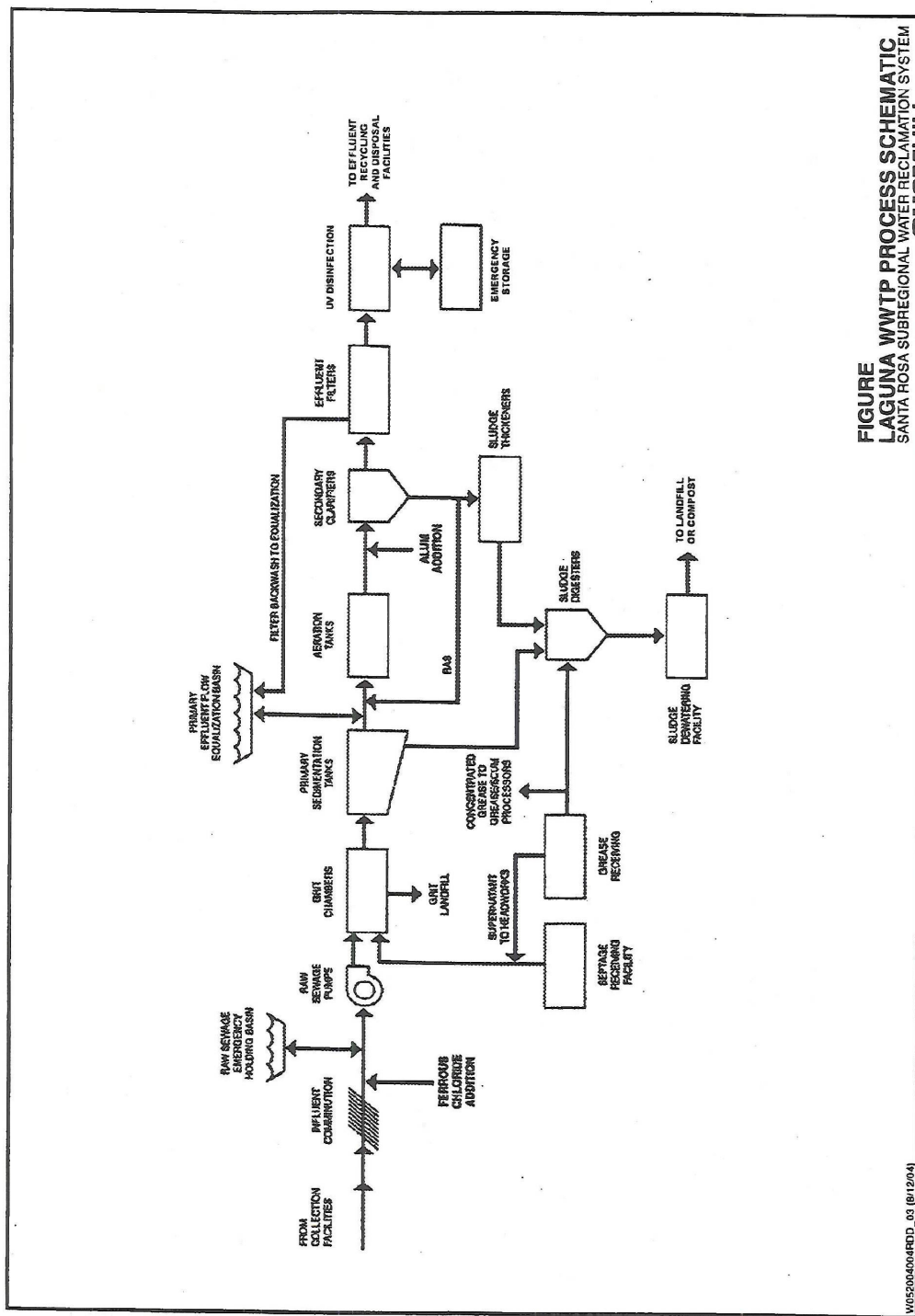


FIGURE  
LAGUNA WWTTP PROCESS SCHEMATIC  
SANTA ROSA SUBREGIONAL WATER RECLAMATION SYSTEM  
CH2MHILL

W052004004R00 03 (8/12/04)

ATTACHMENT C – FLOW SCHEMATIC



## **ATTACHMENT D – FEDERAL STANDARD PROVISIONS**

### **I. STANDARD PROVISIONS – PERMIT COMPLIANCE**

#### **A. Duty to Comply**

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [40 CFR §122.41(a)].
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement [40 CFR §122.41(a)(1)].

#### **B. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order [40 CFR §122.41(c)].

#### **C. Duty to Mitigate**

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment [40 CFR §122.41(d)].

#### **D. Proper Operation and Maintenance**

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order [40 CFR §122.41(e)].

#### **E. Property Rights**

1. This Order does not convey any property rights of any sort or any exclusive privileges [40 CFR §122.41(g)].

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations [40 CFR §122.5(c)].

**F. Inspection and Entry**

The Discharger shall allow the Regional Water Quality Control Board (Regional Water Board), State Water Resources Control Board (State Water Board), United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [40 CFR §122.41(i)] [CWC 13383(c)]:

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order [40 CFR §122.41(i)(1)];
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order [40 CFR §122.41(i)(2)];
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order [40 CFR §122.41(i)(3)];
4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location [40 CFR §122.41(i)(4)].

**G. Bypass**

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR §122.41(m)(1)(i)].
  - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production [40 CFR §122.41(m)(1)(ii)].
2. Bypass not exceeding limitations – The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3 and I.G.5 below [40 CFR §122.41(m)(2)].

3. Prohibition of bypass – Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless [40 CFR §122.41(m)(4)(i)]:
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR §122.41(m)(4)(A)];
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance [40 CFR §122.41(m)(4)(B)]; and
  - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provision – Permit Compliance I.G.5 below [40 CFR §122.41(m)(4)(C)].
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [40 CFR §122.41(m)(4)(ii)].
5. Notice
  - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass [40 CFR §122.41(m)(3)(i)].
  - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below [40 CFR §122.41(m)(3)(ii)].

#### H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation [40 CFR §122.41(n)(1)].

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review [40 CFR §122.41(n)(2)].

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that [40 CFR §122.41(n)(3)]:
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR §122.41(n)(3)(i)];
  - b. The permitted facility was, at the time, being properly operated [40 CFR §122.41(n)(3)(i)];
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) [40 CFR §122.41(n)(3)(iii)]; and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [40 CFR §122.41(n)(3)(iv)].
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof [40 CFR §122.41(n)(4)].

## **II. STANDARD PROVISIONS – PERMIT ACTION**

### **A. General**

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition [40 CFR §122.41(f)].

### **B. Duty to Reapply**

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit [40 CFR §122.41(b)].

### **C. Transfers**

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the CWC [40 CFR §122.41(l)(3)] [40 CFR §122.61].

## **III. STANDARD PROVISIONS – MONITORING**

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity [40 CFR §122.41(j)(1)].
- B. Monitoring results must be conducted according to test procedures under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise

specified in 40 CFR Part 503 unless other test procedures have been specified in this Order [40 CFR §122.41(j)(4)] [40 CFR §122.44(i)(1)(iv)].

#### **IV. STANDARD PROVISIONS – RECORDS**

- A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time [40 CFR §122.41(j)(2)].
- B. Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements [40 CFR §122.41(j)(3)(i)];
  2. The individual(s) who performed the sampling or measurements [40 CFR §122.41(j)(3)(ii)];
  3. The date(s) analyses were performed [40 CFR §122.41(j)(3)(iii)];
  4. The individual(s) who performed the analyses [40 CFR §122.41(j)(3)(iv)];
  5. The analytical techniques or methods used [40 CFR §122.41(j)(3)(v)]; and
  6. The results of such analyses [40 CFR §122.41(j)(3)(vi)].
- C. Claims of confidentiality for the following information will be denied [40 CFR §122.7(b)]:
1. The name and address of any permit applicant or Discharger [40 CFR §122.7(b)(1)]; and
  2. Permit applications and attachments, permits and effluent data [40 CFR §122.7(b)(2)].

#### **V. STANDARD PROVISIONS – REPORTING**

##### **A. Duty to Provide Information**

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order [40 CFR §122.41(h)] [CWC 13267].

##### **B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with paragraph (2.) and (3.) of this provision [40 CFR §122.41(k)].



2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) [40 CFR Section 122.22(a)(3)].
3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above [40 CFR §122.22(b)(1)];
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position) [40 CFR §122.22(b)(2)]; and
  - c. The written authorization is submitted to the Regional Water Board and the State Water Board. [40 CFR §122.22(b)(3)].
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and the State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR §122.22(c)].
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations” [40 CFR §122.22(d)].

### C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order [40 CFR §122.41(l)(4)].
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices [40 CFR §122.41(l)(4)(i)].
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board [40 CFR §122.41(l)(4)(ii)].
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order [40 CFR §122.41(l)(4)(iii)].

### D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted **no later than 14 days following each schedule date** [40 CFR §122.41(l)(5)].

### E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided **orally within 24 hours** from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR §122.41(l)(6)(i)].
2. The following shall be included as information that must be reported within 24 hours under this paragraph [40 CFR §122.41(l)(6)(ii)]:
  - a. Any unanticipated bypass that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(A)].
  - b. Any upset that exceeds any effluent limitation in this Order [40 CFR §122.41(l)(6)(ii)(B)].

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours [40 *CFR* §122.41(l)(6)(iii)].

**F. Planned Changes**

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when [40 *CFR* §122.41(l)(1)]:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 *CFR* §122.29(b) [40 *CFR* §122.41(l)(1)(i)]; or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in this Order nor to notification requirements under 40 *CFR* Part 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [40 *CFR* §122.41(l)(1)(ii)].
3. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan [40 *CFR* §122.41(l)(1)(iii)].

**G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements [40 *CFR* §122.41(l)(2)].

**H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting E.3, E.4, and E.5 at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E [40 *CFR* §122.41(l)(7)].

**I. Other Information**

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information [40 *CFR* §122.41(l)(8)].

## VI. STANDARD PROVISIONS – ENFORCEMENT

The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the CWC, including, but not limited to, Sections 13385, 13386, and 13387.

## VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

- A. **Non-Municipal Facilities.** Existing manufacturing, commercial, mining, and silvicultural dischargers shall notify the Regional Water Board as soon as they know or have reason to believe [40 CFR §122.42(a)]:
1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [40 CFR §122.42(a)(1)]:
    - a. 100 micrograms per liter (µg/L) [40 CFR §122.42(a)(1)(i)];
    - b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony [40 CFR §122.42(a)(1)(ii)];
    - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(1)(iii)]; or
    - d. The level established by the Regional Water Board in accordance with 40 CFR §122.44(f) [40 CFR §122.42(a)(1)(iv)].
  2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" [40 CFR §122.42(a)(2)]:
    - a. 500 micrograms per liter (µg/L) [40 CFR §122.42(a)(2)(i)];
    - b. 1 milligram per liter (mg/L) for antimony [40 CFR §122.42(a)(2)(ii)];
    - c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(2)(iii)]; or
    - d. The level established by the Regional Water Board in accordance with 40 CFR §122.44(f) [40 CFR §122.42(a)(2)(iv)].
- B. **Publicly-Owned Treatment Works (POTWs).** All POTWs shall provide adequate notice to the Regional Water Board of the following [40 CFR §122.42(b)]:

1. Any new introduction of pollutants into the POTW from an indirect discharger that would be subject to Sections 301 or 306 of the CWA if it were directly discharging those pollutants [40 *CFR* §122.42(b)(1)]; and
2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of the Order [40 *CFR* §122.42(b)(2)].
3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW [40 *CFR* §122.42(b)(3)].